

AR46

file

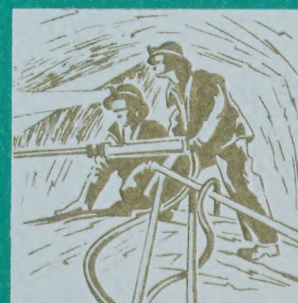
*Discovery*

*Mines*

L I M I T E D

ANNUAL REPORT

1968







# DISCOVERY MINES LIMITED

## Highlights 1950 – 1968

Tons Milled .....	1,018,786
Ounces Gold Produced .....	1,023,575
Value of Production .....	\$36,417,281
Net Profit .....	\$ 8,512,410
Total Dividends .....	\$ 5,632,131

## Historical Highlights of the Discovery Gold Mine

- 1945 High grade North Zone discovered.
- 1946 Sinking of 3-compartment shaft commenced in November.
- 1948 All equipment for 100-ton mill lost in storm on Great Slave Lake in September.
- 1950 Production started January 1st. Mine financed to production through the sale of treasury shares. Cost to production, including underground development to 275 feet, was \$1,037,000. First gold bricks poured February 10th.
- 1951 First shaft deepening program and discovery of the high grade No. 4 Vein on the 950 foot level.
- 1952 Construction of a 42-mile hydro electric power line approved and financed by a rights issue to shareholders.
- 1953 Hydro power received in April with resultant substantial cost savings over diesel electric power.
- 1954 Dividend payments initiated.
- 1956 Mill capacity increased from 100 to 150 tons per day.
- 1958 Discovery of No. 16 Vein on 2,000 foot level. Construction of airstrip from mill tailings allowing servicing of property by aircraft the year round.
- 1960 Shaft deepening to 4,060 feet with bottom or 27th level established at 3,950 feet. Pioneered truck convoy haulage of supplies over a winter road resulting in considerable cost savings over tractor trains.
- 1961 First evidence of deterioration of vein structure at depth.
- 1962 Mine became eligible for cost aid assistance.
- 1963 Mill rate increased to 200 tons daily.
- 1966 Mill rate increased to 225-240 tons daily.
- 1968 One millionth ounce of gold produced and one millionth ton of ore treated.

# DISCOVERY MINES LIMITED

AS AT DECEMBER 31, 1968

<b>OFFICERS</b>	J. J. BYRNE - - - - - <i>Chairman of the Board</i>
	J. C. BYRNE - - - - - <i>President</i>
	D. S. HAMILTON - - - - - <i>Secretary-Treasurer</i>
<b>DIRECTORS</b>	J. J. BYRNE - - - - - Toronto, Ont.
	J. C. BYRNE - - - - - Toronto, Ont.
	E. S. HOLMGREN - - - - - Detroit, Mich.
	D. O. MUNGOVAN, Q.C. - - - - - Toronto, Ont.
	G. T. SMITH - - - - - Toronto, Ont.
<b>MANAGEMENT</b>	J. C. BYRNE - - - - - Toronto, Ont. <i>Managing Director</i> - -
	R. J. KILGOUR, P.Eng. - - - - - Discovery, N.W.T. <i>General Manager</i> - -
<b>EXECUTIVE ENGINEER</b>	L. A. BEDNARZ, P.Eng. - - - - - Toronto, Ont.
<b>CONSULTANTS</b>	NORMAN W. BYRNE, P.Eng. - - - - - Yellowknife, N.W.T. <i>Consulting Engineer</i> -
	J. K. B. BOOTH, P.Eng. - - - - - Toronto, Ont. <i>Consulting Geologist</i> -
<b>SOLICITORS</b>	MUNGOVAN & MUNGOVAN - - - - - 80 King St. W., Toronto, Ont.
<b>AUDITORS</b>	COLLINS, LOVE, EDDIS, VALIQUETTE & Co. - - - - - 110 Yonge St., Toronto, Ont.
<b>TRANSFER AGENTS AND REGISTRARS</b>	CROWN TRUST COMPANY - - - - - 302 Bay St., Toronto, Ont.
	BANKERS TRUST COMPANY - - - - - New York, N.Y.
<b>BANKERS</b>	ROYAL BANK OF CANADA, Bay and Temperance Branch, Toronto, Ont.
	CANADIAN IMPERIAL BANK OF COMMERCE, Yellowknife, N.W.T. — Whitehorse, Y.T.
<b>EXECUTIVE OFFICE</b>	Suite 1011, 2200 Yonge St., Toronto 12, Ont.
<b>ANNUAL MEETING</b>	April 29, 1969, 11:00 a.m., New Brunswick Room, Mezzanine Floor, Royal York Hotel, Toronto.



## Directors' Report

### TO THE SHAREHOLDERS:

Your Directors present herewith the 22nd Annual Report of the Company for the year ended December 31, 1968.

After 19 years of profitable production, the Discovery gold mine will cease operations at the end of March. Reflecting the relatively low grade of ore that was treated in 1968, the operating profit of \$235,307 was a reduction of 55 per cent from that of the previous year. Due to significantly higher exploration expenditures, net profit was \$93,879, equivalent to 3.4 cents per share, and this compares with \$463,351 or 16.9 cents per share for 1967.

At a Special General Meeting held on December 30, 1968, Shareholders approved a resolution increasing the Board of Directors from five to seven in order to accommodate representation by Empire Films Limited, a private company. On February 4, 1969, Messrs. J. Austin, G. H. Beeston, and J. K. B. Booth were elected to the Board of Directors. It will be recalled that Discovery had sold 730,000 shares of Rayrock Mines Limited at \$2.20 per share to Empire Films, and it will be noted that Discovery still retains as an investment 1,001,700 shares of Rayrock. As a result of the aforementioned sale your Company's working capital position was considerably strengthened, and at year end this amounted to over \$2.4 million.

During the past two years, three large mining and oil groups have outlined some six million tons of copper-pyrite ore on a property in Ireland which was previously in production from 1958 to 1962. This work indicates that a mining operation of 2,000-3,000 tons daily is feasible if copper prices remain reasonably stable. Discovery has incorporated a new Canadian company, and agreements have been entered into giving the new company the right to acquire a controlling interest in Avoca Mines Limited, the Irish Company holding the right to obtain title to the mining property. Estimated cost to place the mine into production is \$4.5 million, taking advantage of present plant facilities. Discovery is to provide up to \$2.5 million and receive about 50 per cent of the issued shares in the new company together with some debentures. Discovery will also provide the staff for the operation. The transaction is contingent upon the new company raising at least \$1.5 million through a public offering of its shares.

Rayrock Mines, in which a 22.4 per cent equity is held, anticipates 1969 earnings to be comparable to that of the previous period during which gross operating profit was \$1,016,298, cash flow \$588,835, and net profit \$405,447. Rayrock's income is derived from a 21.4 per cent interest in the Icon Sullivan Joint Venture copper property, from petroleum production in Southwestern Ontario, and from investments. As at January 31, 1969, Rayrock's cash and investments at market value totalled \$4.0 million.



## DISCOVERY MINES LIMITED

Shareholders are reminded that gold is still very much a part of the Discovery image as interests are held in several gold prospects each of which could become economic propositions at substantially higher prices for the precious metal. The most promising are a large tonnage, low grade deposit at Indin Lake, and a high grade, modest tonnage prospect at Gordon Lake, both of which are in the Northwest Territories.

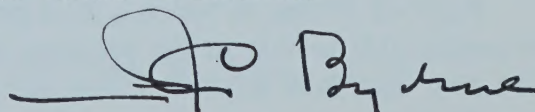
The past year has witnessed considerable unrest in international money circles, while appreciation for gold has become increasingly evident. Despite attempts on the part of some to discredit the importance of gold, the metal nevertheless performs a function unsurpassed by any other monetary asset — that of instilling confidence. Recognizing that the world's business revolves on confidence and credit, one sees that confidence in paper currencies has seriously deteriorated, while credit has attained excessive levels. Therefore, it is not at all surprising that gold is being aggressively sought as protection against political mismanagement. In spite of assertions by the United States that the official price of gold will not be revalued, the rest of the world has thus far been prepared to pay a 25 per cent premium for the precious metal.

The fundamental problems threatening the stability of the world's financial structure have yet to be resolved. Such nations as the United Kingdom and the United States, that have chronic international payment problems, are reluctant to accept orderly adjustment. Various schemes have been proposed to restore health to the ailing monetary system, but none has won universal acceptance. What is required is a material increase in the price of gold which is the foundation of the system. To be truly effective the increment adjustment would have to be substantial, and any revaluation short of U.S. \$70 per ounce would be unrealistic. Furthermore, a case for a higher gold price may be argued if for no other reason than to reflect the inflation that has occurred since the metal was last revalued in 1934. The year 1969 appears to be an appropriate one for a major reform.

Mr. J. J. Byrne has retired as a Director and Chairman of the Board after 23 years of devoted service. "J.J.'s" contribution to the Board over the years has been invaluable and certainly his wise counsel will be greatly missed.

Your Directors wish to record their appreciation of the loyal service and conscientious efforts rendered by the General Manager, Mr. R. J. Kilgour, his staff and all employees of the Company.

On behalf of the Board of Directors



J. C. BYRNE

President and Managing Director

Toronto, Ontario  
March 14, 1969

# DISCOVERY MINES LIMITED

## Statement of Operations

For the Year Ended December 31, 1968

Revenue	1968	1967
Metal production .....	1,297,674	1,937,518
Investment income .....	38,061	34,423
Estimated amount recoverable under the Emergency Gold Mining Assistance Act .....	242,557	97,338
	<u>1,578,292</u>	<u>2,069,279</u>
Expenditure		
Cost of metal production, including mining, milling, delivery and mint charges .....	1,148,500	1,262,528
Exploration and development .....	74,484	158,134
Head office, administrative and general expenses .....	73,030	68,921
Bank interest .....	960	204
Directors' fees .....	4,500	4,500
	<u>1,301,474</u>	<u>1,494,287</u>
Profit before depreciation .....	276,818	574,992
Deduct:		
Depreciation on buildings, plant and equipment .....	41,511	53,264
Operating profit .....	<u>235,307</u>	<u>521,728</u>
Deduct:		
Maintenance expense at LaForma, Yukon Territory .....	5,204	4,136
Outside exploration .....	136,224	42,241
	<u>141,428</u>	<u>46,377</u>
Net profit before income taxes .....	93,879	475,351
Less:		
Estimated Northwest Territories royalty tax .....		12,000
Net profit for the year .....	<u>\$ 93,879</u>	<u>\$ 463,351</u>



# DISCOVERY MINES LIMITED

## Balance Sheet as at

### ASSETS:

Current	1968	1967
Cash .....	291,586	123,482
Short-term notes and certificates — at cost .....	2,000,000	403,245
Other short-term investments, at lower of cost or market .....	19,039	
Bullion on hand and in transit .....	74,917	152,595
Receivable under the Emergency Gold Mining Assistance Act — estimated	86,734	47,964
Accounts receivable .....	89,856	59,789
	<u>2,562,132</u>	<u>787,075</u>
Investment in other companies (Note 1) .....	1,247,804	2,018,697
<b>Investment in and Advances to Subsidiary Company, Camlaren Mines Limited (Note 2)</b>		
Investment in shares, at cost .....	252,058	252,058
Advances .....	56,109	14,954
	<u>308,167</u>	<u>267,012</u>
<b>Mining Properties</b>		
Mining claims and options — acquired for cash and shares of capital stock as valued by the directors of the company .....	291,432	277,932
Land, buildings, plant and equipment, at cost, less accumulated depreciation (Note 3) to date 1968 — \$2,489,916 1967 — \$2,448,405 .....	263,913	288,671
Deferred exploration and development expenditures (Note 4) .....	451,364	451,364
	<u>1,006,709</u>	<u>1,017,967</u>
<b>Other</b>		
Mine stores, at cost .....	162,047	210,712
Prepaid expenses and sundry deposits .....	33,226	23,998
Incorporation expense .....	4,837	4,837
	<u>200,110</u>	<u>239,547</u>
	<u>\$5,324,922</u>	<u>\$4,330,298</u>

### AUDITORS' REPORT

To the Shareholders,  
Discovery Mines Limited.

We have examined the balance sheet of Discovery Mines Limited as at December 31, 1968 and the statements of retained earnings, operations and source and application of funds for the year ended on that date. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

Toronto, Canada,  
March 4, 1969.



# DISCOVERY MINES LIMITED

at December 31, 1968

## LIABILITIES:

### Current

	<u>1968</u>	<u>1967</u>
Accounts payable and accrued charges .....	138,462	126,896
Estimated N.W.T. royalty tax payable .....		12,000
Unclaimed dividends .....	5,990	5,990
	<u>144,452</u>	<u>144,886</u>

### Capital and Surplus

Capital Stock		
Authorized		
4,000,000 shares of \$1.00 par value each .....	<u>\$4,000,000</u>	
Issued and fully paid		
2,734,773 shares .....	2,734,773	2,734,773
Contributed surplus .....	189,324	189,324
Retained earnings .....	<u>2,256,373</u>	<u>1,261,315</u>
	<u>5,180,470</u>	<u>4,185,412</u>

The accompanying notes are an integral part of these financial statements.

Approved on behalf of the Board,

J. C. BYRNE, Director.

D. O. MUNGOVAN, Director.

<u>\$5,324,922</u>	<u>\$4,330,298</u>
--------------------	--------------------

In our opinion, these financial statements present fairly the financial position of the company as at December 31, 1968 and the results of its operations and the source and application of its funds for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

COLLINS, LOVE, EDDIS, VALIQUETTE & CO.,  
Chartered Accountants.

# DISCOVERY MINES LIMITED

## Notes to Financial Statements

As at December 31, 1968

### 1. Investment in other companies

	December 31, 1968	December 31, 1967
	Number of shares	Cost
Rayrock Mines Limited .....	1,001,700	1,774,051
Bow Valley Industries Ltd., preferred .....	1,500	23,475
		<u>1,797,526</u>
Other shares (unlisted or escrowed) and debentures at cost less allowance for possible loss on realization of \$1,225,000		223,740
		<u>\$1,247,804</u>
Quoted market value of listed shares		221,171
December 31, 1968 — \$3,176,700		
December 31, 1967 — \$2,331,400		

### 2. Subsidiary company

The company holds 70% of the outstanding share capital of Camlaren Mines Limited.

By agreements dated November 30, 1964, October 15, 1965 and March 5, 1968, the company agreed to carry out, by December 31, 1973, a programme of exploration and development upon the 21 mining claims held by Camlaren Mines Limited in the Gordon Lake Area, N.W.T. at a total cost of \$317,000. In consideration of the company carrying out the said programme, Camlaren Mines Limited agreed to assign to the company a 66⅔% undivided interest in the said mining claims.

The accounts of the subsidiary company have not been consolidated in these financial statements. During 1968 Camlaren Mines Limited was inactive except for the following expenditures carried out on its behalf by the parent company:

Bulk supplies placed in storage at Camlaren property, including transportation cost .....	23,228
Rehabilitation of surface buildings and caretaking .....	17,927
	<u>\$ 41,155</u>

### 3. Fixed assets — LaForma property, Yukon Territory

Included under land, buildings, plant and equipment are buildings and equipment at the LaForma property at a cost of \$401,898 less provision for estimated loss on disposal of \$265,411. Operations were suspended at this property in 1966. The amount which ultimately may be realized from these assets will depend upon the time of sale and location to which they are moved.

### 4. Deferred exploration and development expenditures

Deferred exploration and development expenditures of \$451,364 consist of expenditures by a predecessor company upon mining claims in the Mattagami Lake Area of Quebec and other locations.

It is the policy of the company to carry these expenditures forward until such time as they can be written off against revenue from these properties.

### 5. Remuneration of directors and senior officers

The aggregate direct remuneration paid to directors and senior officers (as defined by The Corporations Act, Ontario) for the year ended December 31, 1968 was as follows:

Directors and senior officers .....	23,700
Senior employees (not officers or directors) .....	51,140
	<u>\$ 74,840</u>

### 6. Pension plan

The Company has a contributory pension plan covering approximately 19 employees. The plan is financed by employee contributions of 5% of earnings and a company contribution of approximately \$11,000 annually to cover the balance of cost.

The plan is fully funded in accordance with actuarial calculations of the liability for accrued pension benefits.

### 7. Employees' incentive stock purchase options

Stock purchase options were granted on October 31, 1968 to key employees on a total of 120,000 shares of capital stock at a price of \$1.35 per share, exercisable as to 40% at the end of the first year, as to 30% at the end of the second year, and as to 30% at the end of the third year. The said options are cumulative and exercisable at any time to the end of the fifth year.



# DISCOVERY MINES LIMITED

## Statement of Retained Earnings

For the Year Ended December 31, 1968

	<u>1968</u>	<u>1967</u>
Balance at beginning of year .....	1,261,315	2,107,250
<b>Add:</b>		
Net profit for the year .....	93,879	463,351
Profit on sale of investments .....	901,626	
Adjustment of Northwest Territories royalty tax of prior years .....		12,333
	<u>2,256,820</u>	<u>2,582,934</u>
<b>Deduct:</b>		
Adjustment of Northwest Territories royalty tax of prior years .....	447	
Dividend paid — 1967 .....		82,043
Adjustment of 1966 pension cost .....		14,576
Allowance for possible loss on realization of investments .....		1,225,000
	<u>447</u>	<u>1,321,619</u>
Balance at end of year .....	<u>\$2,256,373</u>	<u>\$1,261,315</u>

# DISCOVERY MINES LIMITED

## Statement of Source and Application of Funds

For the Year Ended December 31, 1968

Source of Funds	1968	1967
Net profit for the year .....	93,879	463,351
Depreciation .....	41,511	53,264
Sale of investments in other companies .....	1,675,088	
Sales of LaForma fixed assets .....	12,570	48,288
Reduction in mine stores .....	48,665	1,884
Adjustment of Northwest Territories royalty tax of prior years .....		12,333
	<u>1,871,713</u>	<u>579,120</u>
 Application of Funds		
Purchase of investments in other companies .....	2,569	60,692
Advances to subsidiary company .....	41,155	1,796
Payments on mining claims held under option .....	5,000	5,000
Cost of staking mining claims .....	8,500	
Additions to fixed assets .....	29,323	12,764
Increase in prepaid expenses and sundry deposits .....	9,228	14,684
Adjustment of Northwest Territories royalty tax of prior years .....	447	
Adjustment of 1966 pension cost .....		14,576
Dividends paid .....		82,043
	<u>96,222</u>	<u>191,555</u>
Increase in working capital .....	<u>\$1,775,491</u>	<u>\$ 387,565</u>

### WORKING CAPITAL

Working capital at beginning of year .....	642,189	254,624
Increase .....	1,775,491	387,565
Working capital at end of year .....	<u>\$2,417,680</u>	<u>\$ 642,189</u>



# DISCOVERY MINES LIMITED

## MINE OPERATIONS REPORT

After 19 years of profitable operations the Discovery gold mine will shortly cease production. In the year 1968 the mine produced its one millionth ounce of gold which achievement closely coincided with the milling of the one millionth ton of ore.

Average grade of ore treated during the past year was 0.40 ounces gold per ton, and this compares with 0.61 ounces per ton in 1967, and 0.74 ounces per ton in 1966. Profit margins during the period of grade deterioration have been quite satisfactory as operating costs have been correspondingly reduced.

Now that the veteran gold producer is on a salvage basis it may be of interest to reflect back on that period during which Discovery was one of the highest grade gold mines in Canada. From 1954 to 1961 the average grade treated in each of the years was well over 1.5 ounces gold per ton. A grade of 1.78 ounces per ton was recorded in 1958.

Exploration for new ore occurrences continued into 1968 following the encouragement realized in the previous year. The newly discovered No. 19 Vein proved to be narrow and erratic although it nevertheless yielded a modest tonnage of additional mill feed. All geologically favourable areas in the mine were thoroughly investigated but the exploration effort was non-productive. By mid-year underground exploration and development were suspended.

Mr. R. J. Kilgour, General Manager, reports that mining during the period was concentrated on the No. 4B and No. 16 Veins. Together these two sources accounted for approximately 70 per cent of the total mill receipts. Some remnant areas in the upper workings provided modest tonnages of ore.

Remaining reserves, which are low grade, will carry operations through to the end of March.

## MILLING STATISTICS

	<u>1968</u>	<u>1967</u>	<u>1950-1968</u>
Tons Milled . . . . .	86,612	85,772	1,018,786
Tons Milled Daily . . . . .	237	239	149
Mill Heads — oz. per ton . . . . .	0.40	0.61	1.02
Mill Heads — Value per ton . . . . .	\$ 14.98	\$ 22.59	\$ 35.53
Mill Recovery — per cent . . . . .	97.9	98.2	98.0
Mill Operating Time — per cent . . . . .	97.0	98.8	
Ounces Gold Produced . . . . .	34,172	51,007	1,023,575
Value of Production . . . . .	\$1,297,674	\$1,937,518	\$36,417,281
Price Received for Gold . . . . .	\$ 37.72	\$ 37.71	\$ 35.58

# DISCOVERY MINES LIMITED

## OPERATING COST STATISTICS

	1968		1967	
	Per ton Milled	Per Ounce Produced	Per ton Milled	Per Ounce Produced
Development .....	\$ 1.19	\$ 3.02	\$ 2.49	\$ 4.18
Mining .....	8.30	21.04	10.08	16.93
Milling .....	4.38	11.09	3.70	6.21
Total Operating Costs Before Depreciation and Taxes	\$ 13.87	\$ 35.15	\$ 16.27	\$ 27.32

## DEVELOPMENT AND DRILLING STATISTICS

	1968	1967	1947-1968
Shaft Sinking .....	—	—	4,060 ft.
Raises and Ore Passes .....	—	245	18,065 ft.
Drifts and Cross cuts .....	1,113	1,777	50,473 ft.
Diamond Drilling — Surface .....	—	—	25,605 ft.
Diamond Drilling — Underground .....	8,548	23,131	265,661 ft.



# DISCOVERY MINES LIMITED

## HOLDINGS IN OTHER COMPANIES

### RAYROCK MINES LIMITED

Your Company owns as an investment 1,001,700 shares of Rayrock Mines which represents a 22.4 per cent equity interest.

Rayrock reported a cash flow of \$588,835 and a net profit of \$405,447 for the fiscal year ended October 31, 1968. Earnings showed only a modest change from that of the previous year due primarily to a very substantial increase in exploration expenditures, both in mining and in petroleum, from \$70,587 to \$293,243.

A satisfactory performance was recorded by the Icon Sullivan Joint Venture in which Rayrock holds a 21.4 per cent interest. The Chibougamau region copper producer in less than two years of operations has returned to its sponsors well over twice the capital invested in the venture. It will be recalled that the mine attained production status in May, 1967, and that the ore is trucked to the Merrill Island concentrator for custom milling. A total of 320,776 dry tons of ore averaging 3.3 per cent copper has been milled from commencement of operations to January 31, 1969.

Trackless mine equipment is being employed in the mining of the shallow underground zone which hosts about two thirds of the remaining reserves. The balance is contained in two open pit zones, one of which is particularly high grade and which has been partially developed. At the current production rate of 200,000 tons per year ore reserves are equivalent to about four years of mining.

As operator of two oil fields in Southwestern Ontario, the Petroleum Division just failed to register increased revenue and profits for the sixth consecutive year due to a brief disruption

in crude oil deliveries to one of the Sarnia refineries.

Rayrock is a participant in several prominent exploration syndicates. The Company is a financial sponsor, with a 25 per cent participation, in Bernack Coppermine Exploration Limited which made an intriguing copper discovery in the Coppermine River district of the Northwest Territories. Follow-up work in 1969 will evaluate the potential of the find together with other interesting showings.

As at January 31, 1969, Rayrock's cash and investments at market value totalled \$4,000,000.

### CAMLAREN MINES LIMITED

During 1968 some rehabilitation of plant and buildings was carried out at the Camlaren gold property situated on Gordon Lake. In addition, such bulk items as shaft timber and diesel fuel were transported over a winter road to the mine site.

As much as the Company would prefer to see much higher gold prices before undertaking the proposed underground exploration and development, there is a possibility that the program may be advanced during the next twelve month period. Future work would entail deepening of the shaft for at least 500 feet to accommodate additional levels below the existing workings which were established in the 1930's. Previous underground drilling from the bottom level at 350 feet indicated that the main structure known as the Hump Vein continues to display strong characteristics at 625 feet below surface with no deterioration in grade. When Discovery Mines, which has a 70 per cent share interest in Camlaren, undertook bulk sampling

## DISCOVERY MINES LIMITED

some years ago, the average grade realized was 1.14 ounces gold per ton.

### INDIN LAKE REGION GOLD PROSPECT

Early in 1968 Discovery Mines negotiated a long term working option on two contiguous claim groups of 44 claims in the Indin Lake region of the Northwest Territories. Shortly thereafter an additional 24 claims were staked adjoining the optioned parcel.

A gold bearing quartz diorite porphyry dike traverses the optioned ground for a distance of three miles. Widths of the steeply dipping structure vary from 70 feet to over 200 feet and averages about 100 feet. The gold values appear to be primarily associated with pyritic quartz veins and stringers that impregnate the host rock.

During the 1940's each of the aforementioned claim groups was the object of extensive surface and underground exploration, as well as bulk sampling. Results indicated the presence of substantial tonnages of potential ore having a grade in the order of \$2.50-\$3.00 per ton (gold at \$35 per ounce).

A comprehensive preliminary feasibility study was commissioned and completed during the past year. Both open pit and underground trackless mining methods were evaluated, and as might be expected the profit margins from open pit mining were significantly higher than that generated from underground recovery. At U.S. \$80 gold and assuming a production rate of 3,000 tons per day, the economics of open pitting were shown to be reasonably attractive.

In the event that the official gold price, which has been unchanged at U.S. \$35 per ounce since 1934, is revalued by at least 100 per cent, then

serious consideration would be given to supporting further exploration with the view to attaining production status.

### NORITA QUEBEC MINES LIMITED

No work was performed on the Norita property during 1968. Previous exploration of the Matagami area prospect disclosed two potential ore zones which have a combined drill indicated reserve of 800,000 tons averaging 0.64 per cent copper, 7.29 per cent zinc, and 0.70 ounces silver per ton.

In that the lower zone is open to depth there is incentive to support an underground exploration program when economic and manpower conditions become more favorable.

Discovery Mines holds a 13.7 per cent equity in Norita while the remaining shareholders are Radiore Uranium Mines with a 54.8 per cent interest, and Amagami Mines carrying a 31.5 per cent interest.

### MICRO NICKEL PROJECT

Exploration results of the 1968 program on the optioned nickel-copper prospect, situated 250 miles northwest of Whitehorse, were disappointing.

Shareholders may recall that a decision to initiate underground exploration was prompted by the encouragement realized in 1967. Following de-icing and dewatering of the underground workings subsurface drilling was initiated last June in order to evaluate the ore possibilities at depth. Limited surface drilling was also carried out to define the attitude of a major fault zone, and also to assess the strike potential of sulphide indications west of this break.



## DISCOVERY MINES LIMITED

Good widths of sulphide mineralization were cut west of the major fault structure and also at depth below the bottom mine level. However, nickel and copper values were negligible. Some 4,500 feet of diamond drilling were completed when the 1968 project was suspended in August.

Finances for last year's work were provided by three companies — Discovery Mines (50%), Rayrock Mines (25%), and Pacific Petroleums (25%).

### GENERAL

Prompted by a rumored nickel discovery by Newmont Mining Corporation of Canada, Discovery staked, late last summer, a group of 200 claims in the Campbell-Sifton Lakes region of the Northwest Territories. Situated some 250 miles east of Yellowknife the area was the scene of an extensive staking rush. The Company has called for an airborne E.M.-magnetometer survey to be undertaken early in the exploration season, and ground follow-up will be carried out if airborne results warrant.

Your Company had a 10 per cent participation in the Newarex Syndicate which last year supported an airborne scintillometer survey over select regions of Eastern Canada, with much of the flying done on the North Shore of the Gulf of St. Lawrence. A number of anomalies were discovered but subsequent ground investigations did not disclose anything of economic importance. The Syndicate then negotiated a working option on a promising uranium-gold prospect situated in the Bamaji Lake district, some 80 miles north-east of Sioux Lookout in Northwestern Ontario.

Other members of the Syndicate are Canadian Nickel, Consolidated Canadian Faraday, Frobex, and Rayrock.

In association with Rayrock Mines, a prospecting party was engaged during the past summer in Central British Columbia. Interesting base metal showings were discovered, but nothing of economic consequence was realized.







